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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/530,408  | 06/01/2005  | Kay Rokman           | 3952-78             | 4957             |
| 23117 7590 12/30/2008<br>NIXON & VANDERHYE, PC<br>901 NORTH GLEBE ROAD, 11TH FLOOR<br>ARLINGTON, VA 22203 |             |                      |                     |                  |
| EXAMINER<br>HOPKINS, ROBERT A   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 1797  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 12/30/2008  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/530,408

**Applicant(s)**

ROKMAN ET AL.

**Examiner**

Robert A. Hopkins

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-21 and 23-32 is/are allowed.
- 6) ☒ Claim(s) 22 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claim 28 is objected to because of the following informalities: Claim 28 recites "particles re present". Examiner notes "re" should be replaced with --are--. Appropriate correction is requested.

### ***Claim Rejections - 35 USC § 112***

Claims 22 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites "the bottom layer contains at least 30% by weight of organic fibres having OH functional groups". Examiner notes claim 1 recites "the bottom layer comprising from 45 to 100% by dry weight of organic chemical fibres having OH functional groups". Examiner respectfully submits the range recited in claim 22 falls out of the range recited in claim 1 for the bottom layer, therefore the limitations in claim 22 are indefinite.

Claim 33 recites "which further comprises epichlorohydrin resin". Examiner is unsure where in the filtering medium is the epichlorohydrin resin is located, and how is the resin related to the claimed layers. Correction is requested.

### ***Allowable Subject Matter***

Claims 19-21 and 23-32 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 19 recites an inner layer and a top layer of activated carbon and a middle layer of 45 to 100% by dry weight of organic chemical fibres having OH functional groups and optionally inorganic fibres. Mansfield(2582388) teaches a filtering medium including a top and bottom layer of activated carbon and a middle layer of silica. Heinrich et al(2002/0119723) teaches top and bottom layer of non-woven layers and a middle layer of activated carbon. However neither Mansfield nor Heinrich et al teaches an inner layer and a top layer of activated carbon with the claimed dry weight percentages and a middle layer of 45 to 100% by dry weight of organic chemical fibres having OH functional groups and optionally inorganic fibres. It would not have been obvious to someone of ordinary skill in the art at the time of the invention to provide an inner layer and a top layer of activated carbon with the claimed dry weight percentages and a middle layer of 45 to 100% by dry weight of organic chemical fibres having OH functional groups and optionally inorganic fibres because neither Mansfield nor Heinrich et al suggest such a modification. Claims 20,21, 23-30, and 32 depend on claim 19 and hence are also allowed.

Claim 31 recites an inner layer of activated carbon with a claimed dry weight percentage, a first outer layer of an organic and/or inorganic chemical with a claimed dry weight percentage, and a second outer layer of activated carbon with a claimed dry weight percentage. Mansfield(2582388) teaches a filtering medium including a top and bottom layer of activated carbon and a middle layer of silica. Heinrich et

al(2002/0119723) teaches top and bottom layer of non-woven layers and a middle layer of activated carbon. However neither Mansfield nor Heinrich et al teaches an inner layer of activated carbon with a claimed dry weight percentage, a first outer layer of an organic and/or inorganic chemical with a claimed dry weight percentage, and a second outer layer of activated carbon with a claimed dry weight percentage. It would not have been obvious to someone of ordinary skill in the art at the time of the invention to provide an inner layer of activated carbon with a claimed dry weight percentage, a first outer layer of an organic and/or inorganic chemical with a claimed dry weight percentage, and a second outer layer of activated carbon with a claimed dry weight percentage because neither Mansfield nor Heinrich et al suggest such a modification. Claim 32 depends on claim 31 and hence is also allowed.

***Response to Arguments***

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Hopkins whose telephone number is 571-272-1159. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm, every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rah  
December 22, 2008

/Robert A Hopkins/  
Primary Examiner, Art Unit 1797